	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		**Name**	**Affliation**	**Date Received**	**Comment Code**	**Summary Main Comments**	**Pg. #**	**Add'tional Comments**	**Categorey of Comment**	**For/Against Proposed Decision**	Against	For	Unclear	
2					3-A	· Concerned about 2007 overspray on his property and wants us to consider toxic effects.	1	Includes link to similar story on overspray in Curry County.	Forestry-pesticides					
3		(b) (6)	citizen	12/20/13	3-B	· Notes wildlife and fish just starting to come back. Recent testing of old domestic water supply still shows residual effects.	1		Forestry-pesticides	Unclear			1	
4					4-C	· Oregon needs to prioritize clean water (even for smallest streams) and guard against human-made landslides.	1		Forestry-riparian; landslides; pesticides			1		
5					9-A	· Supports proposed decision.	1		Decision					
6		(b) (6)	citizen	12/25/13	9-B	For too long, has been concerned about landslides, siltation, and clearcuts from forestry and	1		Forestry-landslides, riparian, clear cuts	For				
7					11-A	· Oregan should be penalized. Citizens in Oregon do not have healthy, sustainable old-growth forests, and non-polluted streams.	1		Penalities; General-need to improve water quality					
8			citizen	12/30/13	11-C	· Need to stop runoff from past logging roads.	1		Forestry-roads	for		1		
9					10-C	· Too much focus on water quality improvements. Given population/development increase, even maintaining water quality levels at 1990 levels is a success.	1		General-water quality					
10					10-D	· The CWA has demonstrated that its needed revisions over the years as evidenced by prior amendents and recommends now is another time to address problems with CZARA.	1		General-problems with CZARA					
11					14-B	· Through experience on watershed assoc and previous position in USFS, believes state and OWEB, SWCDs, watershed groups are doing (and have done) a lot to improve wq	1		improvements in water quality					
12					14-D	· ODF is working to strengthen forest rules for riparian protection but face political challenges that require thoughtful science to bring along. Maintaining support of forest industry is important for water quality protection and will take longer than Spring 2014.	2		Forestry-riparian; General-need more time	Against	1			
13					15-C	· There are no meaningful regulatory assurances in OR's CNP to protect water quality and designated uses.	1		General-fails to meet wqs/uses					
14					15-E	· Salmon habitat and continued federal species listings show that the salmon resource(s) in Oregon have been and continue to be declining	2		General-salmon; General-fails to meet wqs/uses					
15	TK				15-E-1	There is a great deal of overlap between indicators of habitat and water quality. Need to fully examine interconnectedness of physical habitat and water quality (temperature, min flow, nutrients, and industrial pollutants).	2		Forestry Riparian					
16	TK				15-E-2	Severing water quality from physical habitat leads to narrow definition of impairment or degradatio								
17					15-F	· NOAA/EPA need to include in future rationales and consider when evaluting future state submissions: interconnected habitat and water quality factors and legacy issues, beaver management, watershed and riparian factors influencing water quality, novel human chemical contaminants, over-allocation of water, urban runoff from older as well as newer developments, and little consideration given to the importance of maintaining groundwater flow connection(s), and climate changes	2		General-need to consider other issues					
18	TK				15-F-1	Greater amounts of LWD in streams contributed by older forests and intact riparian areas, as well as large shifting beaver complexes, helped to maintain floodplains, habitat complexity, hyporheic flow, and hydrologic stability. These are related to sediment, nutrient, and wood routing and retention.			Forestry Riparian					
19	TK				15-F-2	Typical management of coastal lands results in chronic, persistent, unremitting disturbance. This is on top of legacy impacts. Lower reaches of coastal streams show evidence of this…denuded riparian areas, low LWD, unstable banks, high energy channels			Forestry riparian					
20	TK				15-K-1	Riparian areas should be managed for beaver (discontinue practice of alder conversion			Riparian Forestry					
21					15-L	FPA rules are outdated and need to be revised. In 1996 NMFS has stated key problems with rules and improvements. Most of these issues were affirmed by independent scientific panel.	5		Forestry-general					
22					15-M	· Need to consider climate change. Climate stressed organisms can be more sensitive to pollution.	6		General-need to consider other uses			1		
23					18-D	· Organization has tried to speak with ODFW and ODFW Commission leadership but claims offers to meet/hear their recommendations were not acted on.	throughout		Forestry-General			1		
24					19-A	· Oyster farmer in Tillamook Bay	1							
25			citizen	2/28/14	19-E	· Despite many investments in studies from NEP, still a wq problem.	1		General-water quality	For		1		
26					20-A	· OR streams are among the cleanest in nation and provide suitable water for aquaculture.	1		General-water quality					
27					20-B	Additional riparian setbacks would only hurt logging industry and drive up price of lumber.	1		Forestry-riparian					
28	TK				20-B-1	When BLM adopted NWFP buffers it limited the amount of timber that could be harvested. Under old system, one landing. Under NWFP, three landings and two more harvest units to get the same amount of timber. The result of more restrictive riparian buffers would be more ground disturbance			Forestry Riparian					
29					20-C	· Coos County has more forestry than any part of Oregon and more salmon.	1		Forestry-general					

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30		(b) (6)	citizen	1/8/14	20-D	Watershed councils are doing good work and we don't need additional regulation.	1		Forestry-General; General-made improvements to water quality	Against	1			
31					22-B	· Oregon doesn't have practices in place to protect streams from polluted runoff. Although state still claimins programs are effective	1		General-fails to meet wqs/uses					
32					22-C	· Federal/state govn't have responsibiliy to manage waters in the public trust for max. long-term benefit for current/future generations. This is not being done.	1		General-fails to meet wqs/uses					
33					22-D	· TMDLs show that existing programs are not working (high water temps, sediment loads and nutrients).	1		General-fails to meet					
34					22-E	· Many states have stronger NPS controls for forest practices. OR is frequently judged as the weakest along the west coast. Its time for them to change.	2		Forestry-General			1		
35					23-A	· Supports proposed decision (on all counts)---4 forestry concerns, osds and new devel.	2		Decision			1		
36	TK				23-A-1	Oregon has not demonstrated logging controls to protect small, medium, and non-fish bearing streams			Forestry Riparian					
37			citizen	3/14/14	23-B	· Also necessary for state to include ag MM necessary for achieving WQS.	2		Ag-add MMs	For				
38					24-B	· Commentor is fisherman that as witnessed OR's inability to protect fish-bearing streams from forestry runoff (logging and rd building).	1		Forestry-general; Forestry-roads					
39					24-C	· BOF/ODF have had proposals to improve stream protection come before than but to date, have failed to take action.	1		Forestry-riparian					
40					24-D	· DEQ has also failed to take action to respond to forestry issues too.	1		Forestry-General					
41					25-A	· Agrees OR has not met conditions and needs to do more to protect coastal wq but imposing penalities on czm and 319 is wrong.	1		Decision; General-fails to meet wqs/uses; Penalities-negative impacts				1	
42			citizen	3/14/14	25-C	· State legislature is one that needed to take action but has not; rather they have obstructed ODEQ's ability to make the changes the agency wanted to.	1	(b) (6)	General-need to improve water quality	For (but no penalities)				
43			citizen	3/14/14	26-A	· Fisherman and no doubt that polluted runoff is an issue.	1		General-need to improve water quality	For		1		
44					27-A	· No one has authority for small lot foresters.	1		Forestry-General				1	
45					27-B	There is no program that monitors private forestland clear-cuts, or spray and burn operations	1		Forestry-clear cuts; Forestry-pesticides					
46			citizen	3/18/14	27-C	· Need preventive measures to assure that forestry operations near Clear Lake won't make water undrinkable (get drinking water from lake and has observed small-lot foresters airial and hand spraying pesticides/herbicides near lake.Note: I'm including this comment in the riparian review as riparian buffers are a potential preventative measure (TK)	1		Forestry-pesticides and Forestry Riparian	No opinion				
47					28-B	· Very narrow or non-existent buffers along streams that flow into Siletz. Clear cut to banks and airial spraying over cuts.	1		Forestry-riparian; Forestry-clear cuts; Forestry-pesticides					
48	TK				28-B-1	Very narrow buffer zones are visible on the shores of main rivers, such as the Siletz. Even there, you can find places where the forest buffer has been eliminated completely. Streams that flow into the Siletz are in many instances not allowed a buffer zone at all. Concern for drinking water and fish			Forestry Riparian					
49					28-C	· Concerned about contamination of drinking water (Newport gets water from Siletz), fish and soil contamination from spraying. Criminal that state does not provide better protections..especially as rate of clear cutting/forestry activities increase due to increase in China exports.	1		Forestry-General; Forestry-clear cuts					
50					28-E	· Oregon relies largely on voluntary actions for its CNP and is not using back-up authority.	1		General-voluntary approaches					
51					28-F	Even when NOAA/EPA granted OR additional time to address conditions, OR waters are no better than they were before.	1		General-need to improve water quality					
52					28-G	· OR hasn't done anything to address polluted runoff in coastal watersheds and shouldn't be given approval until it does.	2		General-need to improve water quality			1		
53					30-B	· Oregon does not have a program in place to control nonpoint source pollution in our coastal watersheds that carries out CZARA management measures, nor does Oregon have the additional management measures the law requires to achieve and maintain Oregon's water quality standards and measures the law requires to achieve and maintain Oregon's water quality standards and protect Oregon's drinking water.	1		Decision; General-fails to meet wqs/uses					
54					30-C	· Disheartened that Oregon has failed to bring logging practices into compliance with federally approved water quality standards...puts contaminants in our drinking water, directly affecting our personal and community health	2		Forestry-General					
55					30-D	Agrees with NOAA/EPA that OR need to develop add MM for forestry.	2		Forestry-General					
56					30-E	Oregon must increase protection of riparian areas for small and medium fish and non-fish streamsand high-risk landslide areas.	2		Forestry-riparian; Forestry-landslides					
57					30-F	OR must address impacts of forest roads better, including specifically so-called "legacy" roads	3		Forestry-roads					
58					30-G	OR must increase buffers for the application of pesticides to both fish and non-fish bearing streams and take other actions to prevent pesticides from entering water that affects people, fish, and wildlife.	3		Forestry-pesticides					

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59					30-I	· ODFW and NMFS agree many freshwater environmental impacts on Oregon coast coho are human related, including “rearing and spawning habitat loss. (see: http://www.dfw.state.or.us/fish/species/coho.asp). Even ODF has found its logging practices violate water quality standards (see: http://www.science.oregonstate.edu/~madsenl/files/GroomDentMadsen2011.pdf)	3		Salmon-need more protection; Forestry-General; General-fails to meet wqs/uses					
60					30-J	· Watersheds experience landslides from failed logging roads. Sites 4 landslides in Arch Cape (drinking water watershed) in 2013.	3		Forestry-landslides					
61					30-K	· 20 ft buffers ODF mandates on drinking water streams are too narrow to w/stand blowdowns and provide much protection from airial spraying.	4		Forestry-riparian					
62	TK				30-K-1	Noted winter blow down of the already inadequate riparian buffers. Strong coastal winds accelerate through the clear cuts and abruptly hit the buffers with great force. When these buffers fall, there is nothing holding the soil in place so our creeks suffer.			Forestry Riparian					
63					30-L	· Complete lack of buffers on non-fish streams make sedimentation a constant impairment/risk.	4		Forestry-riparian					
64					30-M	· The drinking water for our communities routinely have high levels of known carcinogens, trihalomethanes and haloacetic acids. These high levels are caused when excess sediment that enters public waters from logging roads and inadequate riparian buffers reacts with disinfectants required to treat the water.	4		Forestry-General; Forestry-riparian; Forestry-roads					
65					30-N	·To meet federal drinking standards, both Arch Cape Water District and the City of Rockaway Beach had to install extra filter membranes at signficant cost. Now entire community faces higher water bills.	4		Forestry-General					
66					30-O	· CZARA requires OR to demonstrate that it has additional MMs to meet water quality standards and protect designated uses (salmon, amphibians, drinking water). Oregon has failed to do this. OR relies heavily on voluntary measures which are worthless since tehy are not being adhered to or enforced.	4		General-fails to meet wqs/uses; General-voluntary approaches					
67					30-U	States excuse about inadequate studies and need to postpone actiosn to allow for additional research is unacceptable. Research already exists that shows problems. (Cites DEQ 2011 WQ Status and Action Plan for Northcoast Basin)	5		Forestry-General			1		
68					31-B	· State is failing to protect its already imperiled runs of native salmon/steelhead.	1		General-fails to meet wqs/uses; Salmon-need more protection					
69					31-D	· Timber companies are unaccountable for overuse of pesticides, landslides caused by poorly maintained logging roads, and increased sediment load in our rivers which inhibit salmon spawning ability.	1		Forestry-pesticides; Forestry-landslides; Forestry-roads					
70					34-B	· While forestry is important contributor to NPS, in particular, concerned that OR's programs for new devel and OSDS are not sufficient to meet wqs.	1	Not a Riparian Forestry issue	Forestry-General; New Devel; OSDS					
71					35-A	·Supports disapproval. Local salmon runs have been devestated by forestry/development.	1		Decision; Salmon-need more protection; Forestry-General; New deve	for		1		
72					35-B	·Recent pollution wiped out all coho eggs in local hatchery and kills frogs/salmon in local stream. Paper said state was not investagating pollution source.	1		General-salmon; General-fails to meet wqs/uses					
73					35-C	·Oregon’s efforts to address nonpoint pollution of our waters has been monumental failure (Hecta Water Dist. Near Clear Lake)	2		General-need to improve water quality					
74					35-D	·Clear Lake is directly threatened by pesticide and herbicide applications inside the watershed, as well as land disturbance on steep slopes near the lake from logging operations.	2	Attached 1992 letter from Dr. Larson that has done his own monitoring/observations of Clear Lake.	Forestry-pesticides; Forestry-General					
75					35-E	·DEQ, Lane County, and the City of Florence all regularly adopt rules and regulations which allow development that will obviously pollute the aquifer - commercial stormwater drainage directly into pipes in the aquifer, residential development on septic systems next to lakes and surface water, logging activities that include application of all manner of chemicals, etc.	2		New Devel; OSDS; Forestry-General; Forestry-pesticides					
76					35-I	·Oregon does not have a workable program that meets the requirements of EPA and NOAA for a coastal nonpoint pollution program. Piecemeal approaches such as promises to increase TMDL’s, tighten Department of Forestry riparian rules and decommission legacy roads, are insufficient as basic management measures to grant Oregon approval for a nonpoint program.	4		New devel; Forestry-riparian; Forestry-roads; General-water quality					
77					35-J	·NOAA/EPA need to require Oregon to provide not only a solid framework of basic management measures, but also a detailed and concrete list of additional management measures to actually protect riparian areas, and provide substantially increased protections for fertilizer, herbicide and pesticide applications near fish-bearing and non-fish bearing streams.	4		Forestry-riparian; Forestry-pesticides					
78	TK	(b) (6)	citizen	3/19/14	35-J-1	Loggers in Sutton, Mercer, Woahink, and Siltcoos watersheds have clear-cut timber down to the shores of all four lakes. Much of the entire watershed along the north shore of Mercer Lake was clearcut in 1990, creating the potential for future soil erosion and lake degradation			Forestry Riparian					
79					40-A	· Supports proposed disapproval. Significant clear cuttings occuring in "protected" (Clear Lake) watershed w/ minimal (10 ft) buffers between waterways (including drinking water source) and homes.	1		Decision; Forestry-clear cutting; Forestry-riparian			1		
80					40-B	Spraying and burning also occurs very close to (and over) homes too causing health problems and contaminating drinking water. This should not be allowed.	1		Forestry-pesticides					
81					40-C	· Attempting to relocate during spray/burn events causes financial hardship and spray/burn permits can last for months. Owners are given no warning when activities will occur. Property values are lowered and no one would buy home if tried to sell due to publicity of harmful forestry activities in area.	2		Forestry-pesticides					

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82		(b) (6)	citizen	3/20/14	40-D	· Shocked that OR allows this to happen to its citizens and hopes laws change soon to protect citizen health and drinking water.	2		Forestry-general	For				
83					42-B	· Oregon does not have a program in place to control nonpoint source pollution in its coastal watersheds that is sufficient to carry out the CZARA management measures, as well as the additional management measures the law requires to achieve and maintain Oregon's water quality standards, including protecting Oregon's designated uses, including drinking water standards.	1		Decision; General-fails to meet wqs/uses					
84					42-C	OR's current WQS and drinking water standards are failing to protect drinking water	1		General-fails to meet wqs/uses					
85					42-D	· Jetty Creek watershed provides drinking water to Rockaway Beach. 80% of watershed has been clearcut over past several years even though DEQ source water assessment noted these are steep slopes with erosive soils.	1		Forestry-clear cutting; Forestry-landslide					
86	TK				42-D-1	ODF agreed that the size of the buffer zone left along the lower wetland bordering Jetty Creek seemed questionably effective, but said it was within the law			Forestry Riparian					
87	TK				42-D-2	BLM forester stated that an intact forest helps maintain healthy drinking water and fish habitat. The forest can act as a filer and keep streams cooler.			Forestry Riparian					
88					42-E	· Rockaway Beach drinking water has exceeded the EPA standards for allowable trihalomethane (THM) for the last three years (forms when add Cl to overly turbid waters).	2		Forestry-General					
89					42-I	After having been in contact with numerous public agencies, we are certain that Oregon does not have sufficient laws and regulations in place to insure safe and clean drinking water, as well as adequate fish and wildlife habit.	2		General-fails to meet wqs/uses			1		
90					43-B	Oregon FPA aren't effective and state has no intentions to improve.	1		Forestry-General					
91					43-C	· ODF and Gov's Natural Resource staff say state's land use laws provide protections but if they worked, wouldn't have problems we see today.	1		Forestry-General					
92					43-D	· Logging around Quartz Creek denuded the area. Designation of spotted owl sites and high risk areas meant nothing to operator. Hills, road failures, and on-going erosion verify the consequences of ODF's ineffective rules and laws.	1		Forestry-clear cutting; Forestry-General; Forestry-roads					
93					43-E	Clear that OR forest practices are far behind CA and WA. There are signifant differences in setbacks, notification or application process and consequences for non-compliance rather than just passing the consequences on to future generations.	2		Forestry-General; Forestry-riparian					
94					43-F	· With 70% of Oregon's streams threatened or endangered because of temperature, sediment and chemicals it is past time to reign in these Oregon logging practices and laws do not begin to protect ecosystems or future generational needs	2		Forestry-General; General-fails to meet wqs/uses			1		
95	PL		(b) (6)		43-BBB	Department of Forestry laws are woefully inadequate.	2	Riparian/General						
96					44-B	· OR does not have effective programs in place to limit nonpoint source pollution in our coastal watersheds. The plans and rules they do have are not actually working programs sufficient to meet and maintain water quality standards and protect our clean water, fish and other public uses.	1		General-fails to meet wqs/uses; General-need to improve water quality					
97					44-D	·Areas where program improvement needed that could actually work to control polluted runoff from logging would be protection of riparian areas for small and medium streams (fish and non-fish bearig), including sufficient riparian buffers for application of pesticides along non-fish streams; treating old logging roads often built on fill that are leaching sediment, protection of high-risk landslide areas from cuts	1		Forestry-riparian; Forestry-roads; Forestry-landslides					
98					44-G	Concerned that beavers, which could help re-build our downcutting streams channels and make complex floodplains and wetlands, are trapped or hunted out.	1		Beavers			1		
99					45-A	·NPS is biggest threat to OR coastal waters habitats, etc.	1		General-water quality					
100		(b) (6)	citizen	3/20/14	45-B	Large industry (forestry roads and spraying) is impacting water quality. OR needs laws to protect water quality. Need to use CNP to improve these issues and laws to provide better oversight.	1		Forestry-roads; Forestry-pesticides	For		1		
101	PL		(b) (6)		45-AAA	Large companies with large land holdings are doing a large amount of dangerous activities that impact us all, our wildlife habitats and the purity of our water in our State. These activities require oversight from laws that effectively reign in pollution released into our waterways.	1	Riparian/General						
102					46-B	·Oregon is failing to protect are native fish; native aquatic and aquatic-dependent wildlife including birds, mammals, and amphibians; public and private drinking water; fishing, including eating fish free from contamination; swimming, wading, and boating; and my ability to enjoy the aesthetic qualities of Oregon's waters and wetlands.	1		General-needs to meet wqs/uses					
103					46-C	· State is not doing enough to prevent polluted runoff from forestry--especially related totimber harvesting and riparian protection (fish and nonfish-bearing streams and for pesticide application). (EP -State has many years of failure to control runoff pollution from timber harvest and pesticide use on forest lands)	2		Forestry-General; Forestry-riparian; Forestry-pesticides					

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104					46-D	· Concerned about chemical use and its impacts on neighboring property (sites example of husband experiencing side effects from alledged nearby pesticide use and contamination of domestic water supplies). Need to do more than just adhear to label requirements--that shouldn't be all that is legally required for industry to meet.	5		Forestry-pesticides					
105					46-E	Concerned about insufficient or complete lack of warning from ODF when pesticides will be used near property.	5		Forestry-pesticides					
106					46-F	ODF's assumptions, policies, laws and practices, pose a huge threat to the quality of life, long term economic viability, and sustainability of our communities.	5		Forestry-General					
107					46-G	OR needs to protect surface drinking water in Deer Creek Watershed…critical source of water for residents.	6		Forestry-General; General-needs to meet wqs/uses					
108					46-H	Oregon doesn't have programs in place to protect and restore riparian areas needed to maintain cool stream temperatures and habitat, protect and restore channel conditions from modification, protect and restore wetlands, identify where more protection is needed to protect important habitat for species, identify where more pollution control is needed to protect uses, monitor water quality and use water quality data to improve pollution controls, monitor pesticide use and impacts, assess whether pollution controls are reducing pollution and improving water quality, link the enforcement agencies and process with other agencies, or use enforcement when voluntary actions are not adequate to protect water quality.	7		Forestry-riparian; Ag-riparian; Hydromod; Wetlands; Monitoring-improvements needed; Toxics/Pesticides; General-voluntary approaches					
109					48-A	· State has gotten by with an ineffective piecemeal approach, including promises to tighten TMDL's, increase the size of riparian buffers under Department of Forestry rules for logging on private lands, decommission and/or restore so-called legacy roads in forestlands, and craft a voluntary approach to onsite septic leakage. All of these things are necessary, but none are remotely sufficient to solve the problems facing coastal communities.	1		General-need to improve water quality; Forestry-riparian buffers; Forestry-roads; OSDS			1		
110					48-B	· Supports disapproval. Lack of NOAA/EPA action and penalities has allowed OR to continue limping along with half-measures for seventeen years that are effective while drinking water and other impairments occur.	7		Decision; Penalties					
111					48-C	State has refused to create, use, enforce and maintain a nonpoint program that protects the designated uses.	2		General-fails to meet wqs/uses					
112					48-D	· There are no 6217 MM to protect drinking water from logging--the central issue for coastal communities.	2		Forestry-General					
113					48-E	Agree that state need to adopt add. MM for forestry. Otherwise WQS std/designated uses (drinking water) won't be met.	2		Forestry-General					
114					48-F	· Drinking waters are surrounded by private forest land or are below forest operations. 20ft buffers on fish-bearing streams do not protect from sedimentation and pesticide/herbicide use.	2		Forestry-riparian					
115					48-G	Concerned about ODF's vague public notification requirements when spraying.	2		Forestry-pesticides					
116					48-H	ODF/DEQ don't have regular testing protocols for pesticides after sprays.	2		Forestry-pesticides					
117					48-I	Lack of sufficient protection for non-fish bearing streams is significant issue. Agree with NOAA/EPA that add MM for better rip protection of non-fish bearing streams is needed.	3		Forestry-riparian					
118		Oregon Coast Alliance	organization	3/20/14	48-J	The 20-foot riparian buffer where required is completely ineffective, and subject to blowdown in even a moderate coastal storm.	3		Forestry-riparian	For				
119					19-B	OR doesn't have program in place to meet CZARA requirement and WQS and protect designated uses	1		General-fails to meet wqs/uses					
120					49-C	Oregon has failed to control run-off pollution from timber harvest and logging roads.	1		Forestry-General; Forestry-roads					
121					49-E	Insufficient riparian buffers for fish and non-fish bearing streams contributes to polluted runoff and doesn't have programs in place to adequately protect and restore riparian areas needed to maintian cool stream temperatures and habitat.	1		Forestry-riparian					
122					49-F	OR has failed to control polluted runoff from eroding streambanks and shorelines and the effects of dams on water and habitat and channel modification and doesn't have programs in place to provide adequate protection	1		Hyrdomod					
123					49-H	OR doesn't have programs in place to protect streams/fish from polluted runoff from pesticide use on forest land and monitor pesticide use and impjacts.	1		Forestry-pesticides					
124					49-I	OR doesn't have programs in place to adequately assess whether pollution controls are reducing pollution and improving water quality;	1		Monitoring-improvements needed					
125					49-J	Doesn't believe Oregon has described link between the enforcement agencies and process with other agencies and use enforcement when voluntary actions are not adequate to protect water	1		General-voluntary approaches					
126					53-A	Supports disapproval.			Decision			1		
127					53-B	OR doesn't have programs in place to protect drinking water. Problems with logging, pesticide use, quarries.	1		General-Forestry					
128					53-C	Logging rds/overharvesting/landslides cause excess turbidity that reacts with Cl to produce carcinogens.	1		wqs/uses; Forestry-					
129					53-D	No monitoring after spraying to understand true impacts/risks. Little warning when spraying occurs.	1		Forestry-pesticides					
130					53-E	Need to require turbidity monitoring of streams during and after rainstorms and use enforcement for excess turbidity. Need road surface condition monitoring on a regular basis.	2		Monitoring-improvements needed					

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131					53-F	Problems with FPA include restrictions on clearcuts to 120 ac by one owner (doesn't account for cumulative impacts of nearby owners)	2		Forestry-clear cutting					
132					53-G	Need to ensure quarries operating in drinking water areas are inspected regularly and regulated properly.	2		Monitoring-improvements needed					
133		Oceanside Cleanwater Subcommittee	organization	3/15/14	53-H	DOH only requires inspection of drinking water for organic toxics every 3 yrs. Needs to be more frequent and relevant to when spraying occurs.	2		Monitoring-improvements needed	for				
134					51-B	OR needs to do more to prevent NPS to bays/estuaries. All but one of the bays in which shellfish are farmed commercially require daily monitoring because of pollution impacts of a non-point source origin. Some of these growing areas may end up being closed for over 100 days each year for pollution reasons	1		General- Need to Improve Water Quality					
135					64, 66, 68-B	Values the CNPCP program and 319 $ because programs provide funding for stream improvement and restoration projects and monitoring in our areas. Penalities are counterintuitive	3		General; Penalties - Negative impacts					
136					64, 66, 68-D	Oregon is meeting and in many ways exceeding the federal statutory and regulatory requirements for Coastal Zone Act Reauthorization Amendments (CZARA) grant funding.	1		General					
137					64, 66, 68	To say Oregon landowners have not worked on protecting water quality does not take into account the many volunteer actions we have done. For instance, in the Wilson River watershed, a variety of partners have spent more than 1.4 million dollars restoring and protecting the lower Wilson Watershed.								
138					52-B	FPA is written to protect the timber industry, not the human and wildlife communities it invades, riparian ordinances established to facilitate development and private property “rights” that eschew public responsibility have assured the steady degradation of Oregon’s environmental health and beauty.	1		General-Forestry					
139					54-A	Supports disapproval even though recognizes penalities will hurt programs working to do good.	1		Decision			1		
140					54-B	OR needs improved pesticides application restrictions and protections for all classes of streams in both forestry and agricultural areas. Additionally, we encourage EPA and NOAA to require even greater pesticide protection standards for all land use areas within the Oregon Coastal Zone to prevent many of the unmonitored dangers that these chemicals pose to humans and aquatic species, like salmon.	1		Forestry-Pesticdes; Agriculture-Pesticides					
141					54-F	EPA and NOAA improperly assume that, should riparian buffer standards for type N streams and monitoring programs within the coastal zone adhere to existing state laws and programs concerning water quality and pesticides, then Oregon’s CNPCP would warrant approval. We disagree because existing state and federal laws fail to address large swaths of the pesticide application activities and fail to collect critical pesticide application and risk data.	3		Forestry-Pesticdes; Agriculture-Pesticides					
142					54-G	Documented in a recent report, Oregon’s Industrial Forests and Herbicide Use: A Case Study of Risk to People, Drinking Water and Salmon, private forestry operations in Oregon operate under antiquated and loose regulations, allowing aerial spraying and unmonitored applications of pesticides as compared to their federal forestry operation and border-state counterparts. Specifically 1)There are known endocrine disrupting chemicals entering our drinking water sources and fish-bearing streams. 2) Oregon does not require a no-spray buffer near homes and schools. 3) Aerial herbicide sprays regularly occur directly over headwaters and tributaries of protected salmon streams. 4) Oregon permits pesticides to be sprayed with only the smallest protective buffer of 60 feet from salmon and steelhead streams—a buffer significantly smaller than other Northwest states with similar forest and river ecosystems. 5) Stricter chemical and pesticide rules apply in neighboring states with heavy forestry industries. 6) Under the current administrative rules, the Oregon Forest Practices Act prohibits researchers, doctors and the public from obtaining accurate information about what types and quantities of herbicides are sprayed	6		Forestry-Pesticdes; Agriculture-Pesticides					
143		Beyond Pesticides	organization	3/20/14	54-H	Cites environmental and health risks from glyphosate and other pesticides. Also expressed concerns regarding unknown and unmonitored risks of pesticides.	4-5, 7-10		Forestry-Pesticdes; Agriculture-Pesticides	for				
144					55-A	Supports disapproval	1	1990s to help develop				1		
145					55-B	Notes penalities seem counterintutive to Congress' intent with CZARA to improve coastal wq and does not impact the 2 agencies (ODF/ODA) that can actually do something to address issues. DEQ doesn't have authority to tell ODF/ODA to do something and lacks political will to get it.	2		Penalties					
146					55-J	Protection of riparian areas: ODF's own study, Ripstream, documents that harvesting on private forest land carries a significant risk (estimated at 40%) that harvesting will result in violations of Oregon's water quality standard for protecting cold water.	4		Forestry-riparian					
147					55-K	In theroy, EQC has legal authority to require changes that will provide protection to streams, the practical reality is that there is no certainty whatsoever that there will be any additional riparian protection provided. EQC/DEQ can petition BOF but they can take 2 yrs to act and even then, could decide no to do anything.	4		Forestry-riparian					
148					55-L	Significant stream turbidity issues in Suislaw due to forest activities/rds.	5		Forestry-roads					
149					55-M	Analysis of pesticide application records in the Triangle Lake area west of Eugene shows that in the study area, more than 20 tons of pesticide products were applied in just a three-year period.	5		Forestry-pesticides					
150	AH				55-P	The Board has not given any indication of an intent to provide riparian protection for small non-fish bearing streams which make up 70% or more of the coastal stream miles. While the streams do not support fish, they flow into fish bearing streams.	5		Forestry Riparian					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
151		(b) (6)	citizen	3/20/14	55-N	Supports Beyond Toxics Comments. Need mandatory spray buffers and vegetated riparian zone. Buffers around streams.	6		Forestry-pesticides; Forestry-riparian	for				
152	AH				55-O	ODA is abandoning its approach in addressing riparian improvements. It now appears to have initiated a new program. See the attached specific web sites								
153					56-B	Concerned about the impacts of polluted runoff from currently defined NPSs that are a product of timber harvest, agriculture and urban development. Specifically how those sources currently raise stream temperatures, and pollute our waterways with bacteria, turbidity and sediment and the ways these types of activities impact stream banks stability, and unnaturally increase the speed of runoff and stream flow following precipitation events, altering the natural hydrograph and changing erosion patterns. These types of pollution and other alterations effect threatened species such as Southern Oregon Northern California Coast (SONCC) coho salmon, other aquatic life and the public's ability to safely recreate and obtain clean drinking water.	1 to 2		General- water quality; general-salmon					
154					56-C	OR needs additional MM for forestry. State's claim that land use laws and voluntary FPA are sufficient is false. Much more is needed.	2		Forestry-general					
155					56-D	State has had over 16 yrs of notice backed by numerous studies/reports (1998 conditional approval, IMST, Ripstream, NMFS SONCC, Statewide Eval of FPA Effectiveness) that needs to do more with forestry yet they still claim voluntary is way to go.	2 to 3		Forestry-general					
156	TK				56-D-1	Oregon's forest practices are not sufficient to recover wild salmonids			Forestry -riparian					
157	TK				56-D-2	NMFS determined that OFPA did not have implementing rules that adequately protect coho salmon habitat. Low probability that LWD recruitment could be achieved. OFPA does not provide adequate protection for the production and introduction of LWD to medium, small, and non-fish streams			Forestry -riparian					
158					56-E	NMFS recommeded buffers range from 150-300ft far above 20ft that OR has (only for fish-bearing).	3		Forestry-riparian					
159	TK				56-E-1	Stream side no-cut buffers that have been identified by NMFS as sufficient to protect threatened salmonids include 170-foot from Ordinary High Water (OHW)			Forestry-riparian					
160	TK				56-E-2	Under Northwest Forest Plan no-cut buffers 300-foot on fish bearing streams or 150-foot on non-fish bearing streams			Forestry-riparian					
161	TK				56-E-3	Oregon's no cut buffers need to be increased substantially to ensure large wood recruitment, filtration of sediments and pesticides, and sufficient basal area in the riparian corridor for shade required for protection of cold water			Forestry-riparian					
162					56-F	Need larger spray buffers (may be better tha mulit-agency approach that attempts to monitor pesticide impacts).	3		Forestry-pesticides					
163					56-G	State's July 1, 2013 submission lacks any description or details about what methods the state uses in evaluating effectiveness of BMPs, nor a process for evaluating when additional BMPs may be required to protect beneficial uses, nor any criteria for enforcement if the use (or not) of those BMPs results in detrimental impacts to beneficial uses. The State goes on to claim that "Voluntary reporting of voluntary measures has diminished in past years, however it is reasonable to assume that voluntary measure implementation has not." If reporting has dropped, it does not seem reasonable to assume that implementation continues, considering the voluntary nature.	3		Forestry-roads					
164					56-H	States voluntary approach to address new devel isn't sufficient. TMDLs for a number of parameters certainly cover the bulk of the area in question, but may not cover the whole CZARA area, nor would they be for all the parameters that may be at issue in those areas. Needs to be very clear what authority they will use, show development of an implementation structure, a commitment of resources to that structure, a track record of use of backup authority when criteria require it, and a clearly articulated method to evaluate progress. In the interim while those are being developed, the State needs to be clear on what type of outreach and training will be done as part of the voluntary measures that are being proposed.	4		New Development					
165					56-I	State needs direct rule for new devel.	4		New Development					
166					56-M	We ask that EPA/NOAA require Oregon to implement additional management measures, in particular for agriculture, forestry and urban development, to meet water quality standards and protect designated uses.	8,9		Ag-add MMs; Foresty-general, New Development					
167					58-B	Climate Change Preparation/Mitigation, and Ocean Acidification: Need to prepare for climate change by putting programs in place to prevent harm to water quality and make watersheds more resilient to large storms, by requiring wider stream buffers for forestry and agriculture operations, larger fish-friendly culverts that pass more water from larger storms, improved road drainage, road drainage disconnected from streams, removal of valley bottom and mid-slope roads that intercept the downslope movement of beneficial wood and sediment, reduced road density especially in steep terrain, and better protection for unstable slopes.	1		General-need to include other issues; Forestry-general					
168	TK				58-B-1	Larger stream buffers would store additional carbon and reduce GHG emissions			Forestry riparian					
169					58-C	Oregon's programs for protection of water quality could be improved by fully implementing its statewide land use goals which incorporate concepts of "carrying capacity."	3		General-need to include other issues					
170					58-D	Oregon has approved several TMDLs in the Coast Range but the assumptions underlying those TMDLs are about to be undermined by efforts to reduce stream protection on federal forest lands. All of the alternatives proposed by BLM for the revision of its Resource Management Plans in western Oregon call for significant narrowing of stream buffers, and none of the action alternatives maintain the current buffers. http://www.blm.gov/or/plans/rmpswesternoregon/files/alternfaq.pdf	4		Forestry-General					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
171						The TMDLs approved by the state allow more logging on non-federal lands, under the assumption that there logging near streams on federal lands would be strictly limited. Now it turns out that there will likely be more logging near streams on federal lands, so there needs to be a corresponding decrease in logging near streams on non-federal lands in order to avoid exceeding the watershed scale waste load identified in the TMDLs.			Forestry-logging					
172					58-E	Focus on forest issues have been on shade/sediment. Also need large woody debris.	4,5,6		Forestry-General					
173	TK				58-E-1	Large wood is recruited from a large area adjacent to streams and upslope, including unstable areas that move downslope toward streams (implication is that harvest in riparian areas will result in lack of delivery of large wood to streams)			Forestry riparian					
174	TK				58-E-2	Riparian corridors have been substantially degraded across large portions of the landscape. Restoration and maintenance of productive aquatic habitat is not a common stated objective of State programs that influence the management and use of riparian areas			Forestry riparian					
175	TK				58-E-3	Abundant large wood is essential to maintain biological and hydrological processes in streams (sediment retention and transport; habitat formation; substrate for biological activity). Woody debris comes directly from adjacent riparian area, from tributaries that may not be inhabited by fish, and from hillslopes			Forestry riparian					
176	TK				58-E-4	Large wood is not just needed instream but also adjacent to the stream. Conifer basal area is less in second growth forests. Riparian restoration will depend on regeneration rates of conifers in the future. Regeneration is dependent in part on downed large trees. The role of nurse trees in forest regeneration is widely recognize			Forestry riparian					
177	TK				58-E-5	Greater retention of live trees and snags in riparian stands and adjacent upslope source areas will enhance the generation of future riparian forests			Forestry riparian					
178					58-F	Oregon needs greater controls on spraying chemicals such as pesticides and herbicides in coastal watersheds, especially near streams.	6		Forestry-pesticides; Agriculture-pesticides					
179					58-G	Cites issues w/ existing OR struture for regulating wq. DEQ delegated authority to ODF/ODA (controlled by industry), lack of public participation, BOF stacked by pro-industry, etc.	6,7		Forestry-General; Ag-General; Other					
180					58-H	Cites numerous studies about inadequacy of OFPA and how its worse than federal and neighboring states.	7 to 11		Forestry-clear cut; Forestry-landslides, Forestry-riparian; Forestry-roads					
181	TK				58-H-1	White paper analyzing the proposed O&C Trust, Conservation and Jobs Act provides ample evidence supporting the need for more stringent programs to protect water quality in Oreogn's coastal zone			Forestry riparian					
182	TK				58-H-2	Since streams form a linked network, water quality and stream health is closely associated with the intensity and cumulative extent of forest management activities near streams of all sizes, in all parts of the network. Approximatley 55% of the 27,000 stream miles examined in Oregon are either severely or moderately impacted by nonpoint source pollution			Forestry riparian					
183	TK				58-H-3	The OFPA and similarly intensive forest practices have been widely criticized for failing to protect water quality and salmonid habitat (failures relate to shade, large wood, tributary protection, unstable slopes, and road system impacts)			Forestry riparian					
184	TK				58-H-4	94 percent of riparian areas on non-federal land are ranked as poor with regard to the presence of large conifers			Forestry riparian					
185	TK				58-H-5	Under current management, there are lower levels of large wood than occurred historically, and the potential for recruitment will not result in its replenishment			Forestry riparian					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
186	TK				58-H-6	We urge EPA to carefully review the following additional sources to fully appreciate the water quality impacts of industrial forestry and associated road impacts in coastal watershedsDraft Report of the Forest Practices Committee on Salmon and Watershed. August 2000. NMFS Position Paper of Oregon Forest Practices Independent Multidisciplinary Science Team. 1999. Recovery of Wild Salmonids in Western Oregon Forests: Oregon Forest Practices Act Rules and the Measures in the Oregon Plan for Salmon and Watersheds. Technical Report 1999-1 to the Oregon Plan for Salmon and Watersheds, Governor's Natural Resources Office, Salem, Oregon National Marine Fisheries Service 1998. A Draft Proposal Concerning Oregon Forest Practices National Marine Fisheries Service 1996. Position Paper on the Oregon Forest Practices Act Buchanan, J.B. 2005. Challenges of Avian Conservation on Non-Federal Forests in the Pacific Northwest. USDA Forest Service Gen. Tech. Rep. PSW-GTR-191. 2005. Stout, H.A., P.W. Lawson, D. Bottom, T. Cooney, M. Ford, C. Jordan, R. Kope, L. Kruzic, G.Pess, G. Reeves, M. Scheuerell, T. Wainwright, R. Waples, L. Weitkamp, J. Williams, and T. Williams. 2011. Scientific conclusions of the status review for Oregon Coast coho salmon (Oncorhynchus kisutch). Draft revised report of the Oregon Coast Coho Salmon Biological Review Team. NOAA/NMFS/NWFSC, Seattle, WA. FEMAT Chapter V - Aquatic Ecosystem Assessment, pp V-12 - V-29 "Cumulative Effects of Forest Practices..." by Beschta et al. WA DNR Forest Practices HCP EIS			Forestry riparian					
187		(b) (6)	citizen	3/20/14	59-A	Concerned about pesticide spraying. Secondhand account of citizens in western Lane County that had insecticide show up in blood tests and became ill after pesticide spraying. More needs to be done to protect human health from pesticide exposure.	1		Forestry-Pesticides; Ag-Pesticides	unclear			1	
188					61-B	Oregon has failed to control NPS from timber harvest and the construction and maintenance of logging roads. Last year I participated in steelhead spawning surveys on the Salmonberry River in Oregon's coast range. I saw the results of poorly planned logging roads on steep slopes where whole hillsides had slid down into the creek below after heavy winter rains. I do not believe that Oregon's Forest Practices Act is adequately protecting the riparian areas which results in degraded water quality for fish/wildlfe and drinking water.	1							
189					62-B	Concerned with logging impacts from pesticide/herbicide use and habitat "mistreatment". There should be no aerial spraying close to known drinking water sources.	1		Forestry - Pesticides					
190					62-C	Need more regular monitoring of drinking water for pesticides/herbicides; designated uses and water quality standards in coastal watersheds are not protected.	1		Monitoring - Improvements needed; Forestry - Pesticides					
191					62-D	There should be larger buffers to protect from temperature impacts, particularly in the Siletz River watershed.	2		Forestry - Riparian					
192					63-B	Concerned with logging impacts, particularly from clearcutting and resultant hillside erosion, which may pollute our drinking water spring. We had severe clearcutting around our private forest and this caused substantial loss of river quality.	1		Forestry - General; Forestry - landslides					
193					63-C	Inadequate WQ monitoring of logging impacts	1		Monitoring - Improvements needed					
194					63-D	Inadequate Program for protection and restoration of riparian areas	1		Forestry-riparian					
195					63-E	Disruption from tree harvests and road construction	1		Forestry-roads; clear cut					
196					76-A	Concerned about pesticide spraying. They have tested posititive for pesticide/herbicides even though they run an organic farm.	1	First-hand account	Forestry - Pesticides	unclear			1	
197					76-B	Would like to incorporate many other studies/reports by reference (included links in letter)	1		Forestry - Pesticides					
198			citizen	3/20/14	76-C	Supports pesticide-free buffers around schools, such as near Triangle Lake.	2		Forestry - Pesticides					
199					67-A	Supports disapproval although regrets loss of funding.	1		Forestry - General					
200					67-B	Oregon does not have a program in place to control nonpoint pollution sufficiently to meet the additional CZARA MM needed to attain/maintain wqs and protect designated uses, particularly due to logging on private lands.	1		Forestry - Roads; Forestry - Landslides					
201					67-D	Observed sediment loads from forest roads and landslides	1							
202					67-D	State's own Ripstream study note inadequacy of buffers to control temperature and other WQ impacts	1	Many aerial photos provided to back up assertions	Forestry - Riparian					
203	TK				67-D-1	Current Forest Practices Act buffers are not adequate to prevent significant stream warming			Forestry riparian					
204	TK				67-D-2	Narrow Stream buffer along Kinney Creek (where landslide reached stream)			Forestry riparian					
205					67-E	Additional MMs needed for foresty such as what is described on pg. 7-12 of proposed findings.	1		Forestry - General					
206					67-E-1	Need more measures to buffer streams (especially small and medium fish streams and non-fish streams)			Forestry Riparian					
207					67-F	Used Salmonberry River in north Coast range as prime example of impacts.	2		Forestry - General					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
208		(b) (6)	Rivers Council, private citizen	3/20/14	67-G	Refutes OR's claims the land use laws provide sufficient protection… even if they've helped prevent sprawl, still need to control forest industry that is damaging remote watersheds	11		Forestry - General	for				
209					69-B	Waters are at risk from pesticides and other toxic chemicals, oil and grease, sediment, salts, excess bacteria and nutrients released from agricultural and timber lands, from roads and urban areas, from construction and mining areas, from eroding stream banks, livestock, and faulty septic systems.	1		General - Habitat protection					
210					69-C	Especially concerned about inadequate buffer for aerial spray pesticide application. Oregon has an inadequately small no-spray buffer zone around fish-bearing streams and no effective program to protect non-fish bearing streams.	2		Forestry - Pesticides; Forestry - Riparian	I deleted the Forestry-Riparian general category for this comment. Given the context of the sentence, I believe the commenter is talking about Pesticides related measures primarily. (EP)				
211					70-A	Supports disapproval	1	Report is attached; many references cited				1		
212					70-C	Beyond Toxics report on pesticide/herbicide use in forestry shows that FPA lacks any program to protect Oregon streams and their beneficial uses (see report attached). Requires no pesticide buffer on non-fish streams even though neighboring states (WA, ID) require 25ft buffers. In non-fish bearing streams, amphibians and crawfish are affected by pesticide application	2		Forestry - General; Forestry - Pesticides; Forestry - Riparian					
213					70-D	Unknown risks from synergistic interactions of chemicals mixed together.	2,3		Forestry - Pesticides					
214					70-E	Oregon has inadequate protection of fish-bearing streams and drinking water compared to neighboring states.	3		Forestry - Pesticides; Forestry - Riparian					
215	TK					Reviewer Note: All of the riparian comments relate to no spray buffer widths rather than tree retention buffers during harvest. No additional riparian comments identified								
216					70-F	Oregon has no program to determine the presence of forestry pesticides in the air and resulting in drift and deposition onto surface waters and soils.	3,4		Pesticides - Monitoring					
217					70-G	Herbicides (e.g., Atrazine) can persist in water and can bind with soil particles, so under OR's FPA, pesticides such as atrazine are sprayed into dry channels that become active in wetter months, carrying herbicides downstream to fish.	4		Forestry - Pesticides					
218		Beyond Toxics	organization	3/18/14	70-J	Oregon must develop a research program to determine if aerial application of herbicides is necessary for timber production. Oregon needs additional management measures to protect uses and water quality from pesticide drift.	5		Monitoring - Improvement needed; Forestry - Pesticides	for				
219					77-D	CZARA statute requires a 3-step analysis for the states to take before additional MMs can be imposed, including: 1) identify land uses which may cause or contribute significantly to a degradation of: (A) those coastal waters where there is a failure to attain or maintain applicable water quality standards or protect designated uses, as determined by the State pursuant to its water quality planning processes; or (B) those coastal waters that are threatened by reasonably foreseeable increases in pollution loadings from new or expanding sources. 2) identify Critical Coastal Areas (CCAs); 3) identify additional MMs within CCAs to address impairments and are necessary to attain WQS. This authority to determine additional MMs is reserved exclusively for the state, not the federal agencies. Further, CZARA doesn't require states to adopt additional MMs that "may be necessary" or are "arguably necessary" to meet WQS, only ones that actually "ARE necessary." NOAA/EPA have provided no indication that their self-selected additional MMs will enable the state to meet WQS.	3, 4	This is a very significant comment for the legal team to address. 22-page letter is signed by Heath Curtiss, General Counsel & Director of Government Affairs, OFIC. CC to Gov. Kitzhaber, Richard Whitman & 2 state agency directors (DEQ & DOF)	General - Legal; General - Problems with CZARA					
220					77-E	To overcome Oregon's determination that a particular land use does not contribute significantly to a degradation of water quality standards, the Agencies would need to produce evidence to the contrary. Likewise, to overcome Oregon's determination that additional management measures are not "necessary to achieve and maintain water quality standards," the burden would again be on the Agencies to produce evidence to the contrary.	4		General - Legal; General - Problems with CZARA					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
221					77-F	Oregon's Forest Practices Act establishes a dynamic program that responds promptly and deliberately to environmental issues as they arise. … With respect to water quality, the Oregon Forest Practices Act (the "OFPA") mandates that the Board of Forestry adopt standards for forest practices that "provide for the overall maintenance" of "water resources, including but not limited to sources of domestic drinking water." ORS 527.710(2)(b). The OFPA also charges the Board of Forestry with establishing "best management practices and other rules applying to forest practices as necessary to insure that to the maximum extent practicable nonpoint source discharges of pollutants resulting from forest operations on forestlands do not impair the achievement and maintenance of water quality standards established by the Environmental Quality Commission." ORS 527.765(1). Note that this language hews closely to the CZARA requirement that the CNPCP include additional management measures necessary to "attain or maintain applicable water quality standards." ... Forest Practice Rules are fully enforceable.	4, 5, 6		Forestry - General; Forestry - Legal					
222					77-G	FPA requires BMP monitoring with adaptive feedback. Board has charged ODF with pesticide use monitoring, OAR 629-620-0700(1), and landslides and public safety monitoring. OAR 629-623-0000(4). In each circumstance, the Board will consider the monitoring results and take appropriate action, including when necessary, development of new forest practice rules. Cites example of 2002 road runoff drainage study that led to improved rules. FP Rules have evolved over time.	5, 6	See also App. A for how FP Rules have evolved over time.	Forestry - General; Forestry - Legal					
223					77-H	NOAA/EPA findings that that Oregon's existing measures for protection of medium and small fish bearing streams (type-F) and non-fish bearing streams (type-N) are not adequate to protect water quality and designated uses relies on an uncritical view of the 15-year-old Ripstream IMST, and 12 year-old Sufficiency Analysis, and fails to consider the most current and relevant research. At best, it is an incomplete and inaccurate assessment of the most recent science findings. At worst, it represents a fundamental misunderstanding of the science.	7	Discussion of other research findings continues on p. 8 and following	Forestry - Riparian					
224					77-I	NOAA/EPA misinerpreted the RipStream Study findings. See different RipStream conclusions on p. 8.	8		Forestry - Riparian					
225					77-I	The lack of any discussion about findings from the Watersheds Research Cooperative (the "WRC") represents a huge omission in the Agencies' analysis of the Oregon CNPCP. In the Sufficiency Analysis (ODF and ODEQ 2002) there is a discussion about the adequacy of riparian buffers along small type-N and small and medium type-F streams.	8, 9	Effects on temperature noted in WRC study are discussed on pp. 10-11. WQ & wood recruitment discussed on pp. 12-13.	Forestry - Riparian					
226					77-J	We disagree that the FPA is not protective of high-risk landslide prone areas. in evaluating the results from Turner et. al. (2010), it is misleading to focus only on landslide density relationships. Rather, it is important to also consider the total number of landslides triggered during major storms. While landslide densities have been shown to be higher in steep terrain with young forest stands, the proportion of this area across mountainous terrain is potentially very low, so that potential increases in sediment delivery to public resources from landslides triggered in these areas is also proportionately small. ... Channel alterations from debris flows are a naturalhabitat-forming process and not necessarily negative.	14, 15, 16		Forestry - Landslides					
227					77-K	EPA argues that Oregon must have additional management measures for forestry to protect HLHLs, to maintain good water quality, and to ensure that designated uses are protected. However, EPA does not offer any objective evidence that these additional measures are necessary. We respectfully suggest that EPA consider a landscape-scale view over long timeframes as the proper context for evaluating whether water quality standards and designated uses are impaired or attained. Disturbance and recovery processes are an essential part of these landscape-driven forest ecosystems.	16, 17		Forestry - Landslides					
228					77-L	From a strictly legal perspective, the Agencies have produced no evidence (much less, substantial evidence), that landslides resulting from forest management activities are causing water quality standard exceedances, or negatively impacting aquatic life more than landslides do under background conditions. Without more, a decision to disapprove Oregon's CNPCP would not withstand judicial review.	17		Forestry - Landslides					
229					77-M	Roads: The Agencies "remain concerned" (about forest roads delivering sediment into streams) without citing a single source indicating a problem exists, without citing any water quality standard or beneficial use the rules fail to protect, indeed without citing a single reason for concern.	17		Forestry - Roads; Forestry - Legal					
230					77-N	Roads: There have been significant new rule revisions in 2002 and 2003, and broad success under the Oregon Plan for Salmon and Watersheds, all detailed thoroughly in the State's July submission to the Agencies.	17		Forestry - Roads					
231					77-O	The agencies allege that the state has not provided "a commitment to exercise its back-up authority to require implementation of additional management measures for forestry roads, as needed." This is ludicrous. The rule revisions in 2002 and 2003 indicate that the OFPA is working precisely as it should, and evidence a continuing commitment by the Board of Forestry to implement additional management measures as needed. One would be hard-pressed to imagine better evidence of the Board's commitment. If there were additional data indicating that forest roads continue to "cause or contribute significantly to a degradation of coastal waters"—an issue ODF is actively monitoring under OAR 629-635-0110—then the Board would initiate a new rulemaking, as it has done repeatedly in the past.	17		Forestry - Roads					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
232					77-P	The Agencies also assert that the State has not provided sufficient data to the Agencies to document effectiveness of voluntary efforts under the Oregon Plan. The Agencies suggest that an extensive (and expensive) inventory and reporting program for forest roads is necessary “to determine the extent of forestry road miles not meeting current road standards within the nonpoint management area." Here, the Agencies presume a problem exists (again, without citation to a single source) until the State can prove otherwise. However, nothing in CZARA requires that a state prove a negative. Additionally, data shows that salmon stocks are recovering since the 1990s. Finally, we are not aware of any scientific evidence indicating that habitat and water quality conditions have materially improved in Washington State due to implementation of their road maintenance and abandonment program	18		Forestry - Roads					
233					77-Q	Alleging that Oregon's rules are insufficient without reason, and without any support, is the definition of arbitrary, and a disapproval action on this basis would not survive even cursory judicial scrutiny.	19		Forestry - Roads; Forestry - Legal					
234					77-R	Water quality monitoring of a type-N (non-fish bearing) forest stream during and after herbicide spray operations (applied under OFPA rules and guidelines and FIFRA/labeling regulations) shows no evidence of detrimental impacts. Nevertheless, Oregon continues to support monitoring that would identify potential problems should they arise. ... Recent monitoring has not found a problem with contemporary forest aerial herbicide spray operations; in fact just the opposite. Oregon is currently monitoring for over 100 pesticides, which will aloow the state to respond should herbicides be identified at unacceptable levels.	19, 21	Research supporting OFIC/OSWA comments presented on pp. 20-21.	Forestry - Pesticides					
235					77-S	Since 1998 there have been significant changes in how chemicals are applied to forests under FIFRA. Findings from the Spray Drift Task Force and other research led to revisions in chemical labeling. Pesticide applicators are licensed under FIFRA and recent court rulings have further increased regulation of applicators and land owners. Oregon’s Forest Practices Act rule guidelines state that applications must comply with the most stringent of requirements of either the label, or forest practice rules and guidelines.	19		Forestry - Pesticides					
236					77-T	ODF has developed extensive guidelines for implementing the Oregon Forest Practices Act rules for herbicide applications to forest lands. See Oregon Department of Forestry, Forest Practice Rule Guidance: Chemicals and Other Petroleum Products (2009), available at http://goo.gl/uv8oIH. Also cite pesticide monitoring studies that show no significant impact.	19		Forestry - Pesticides					
237														
238	PL			Oregon Forest Industries and Oregon Small	77-AAA	Private landowners, foresters, and loggers support the OFPA, and application of the rules is high (Robben and Dent 2002).	7	Riparian						
239	PL			Oregon Forest Industries and Oregon Small Woodlands	77-BBB	The WRC study at Hinkle Creek appears to highlight the role of smaller debris to provide shade for type-N streams and the critical role of woody debris and rocks for cover in small fish-bearing reaches.	13	Riparian						
240	PL			Oregon Forest Industries and Oregon Small Woodlands Association	77-CCC	The OFPA rules for small and medium fish-bearing streams do provide minimum requirements for development of large mature trees that can contribute key wood pieces to streams. These contributions can be augmented by discretionary placement of wildlife trees along riparian areas; policies that promote active management of riparian areas to accelerate the development of large mature trees near the stream; and voluntary measures by landowners including retention of additional leave trees in the near-stream area, and placement of large wood or wood-structures in streams as part of active management or other conservation efforts (See discussion on Oregon Plan for Salmon and Watersheds). The long-term wood recruitment needs for Oregon streams can most efficiently be achieved through a combination of these OFPA rules that provide for minimum leave trees along fish-bearing reaches and the many options for voluntary enhancements to targeted reaches needing additional wood volumes.	13	Riparian					

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241	PL			Oregon Forest Industries and Oregon Small Woodlands Association	77-DDD	Perhaps most importantly, the WRC studies are measuring the fish and macroinvertebrate response to contemporary forest practices, and the results are available at http://watershedsresearch.org. The findings so far indicate that timber harvesting on headwater type-N and along small and medium type F streams is not degrading fish populations.	13	Riparian						
242					78-J	ODA's Water Quality Management Program does not ensure landowner compliance with the admittedly insufficient rules. Until recently, compliance with the area rules was only investigated if a signed complaint was lodged.								
243					78-H	ODA has recently developed a new strategy for its water quality program to determine compliance with the rules. This is an important step forward. However, there is still a serious scale problem with the program's ability to ensure compliance with the rules. Under ODA's current plan to assess agricultural landowner compliance with the area rules by 6th field HUC watershed, it can assess compliance in 6-12 6th field HUCs/biennium. At this rate, ODA will be able to assess compliance with its (insufficient) rules in approximately 1500 6th field HUC watersheds containing agricultural land uses statewide in 250 years. This is not a reasonable timeframe to ensure compliance with the rules.	3		Ag - general					
244		Oregon Environmental Council			78-k	Oregon is not reliably or adequately controlling run-off pollution from agricultural lands due to agency reliance on insufficient rules, inadequate enforcement of the rules and lock of an implementation plan with specific timelines and goals to enlist agricultural landowners in the voluntary actions necessary to protect and restore riparian vegetation, prevent erosion and reduce bacteria run-off into local creeks and rivers.								
245					71-F	NOAA/EPA don't provide scientific data or substantial evidence that identifies agriculture land uses as a cause or significant contributor to water quality impairment in Oregon's coastal streams. There is no sound scientific evidence to demonstrate that agriculture lands within the coastal zone in fact cause or significantly contributing to water quality degradation. ODA is required to regulate, based on science, those agriculture activities that are causing the type of water pollution that prohibits the State from achieving and maintaining water quality standards.	4							
246					71-G	As explained in Section III, ODA has the enforcement authority necessary to ensure compliance with watershed basin rules on the coast and throughout the State of Oregon. While opponents of the AWQMP highlight the fact that ODA has only taken a few enforcement actions, implying that ODA is not requiring compliance, nothing could be farther from the truth. The truth is that ODA works directly with land owners in noncompliance to make certain land use changes before enforcement is necessary.	5		Ag - EP&Ms					
247					72-B	EPA & NOAA have found that Oregon forests have adequate stream buffers for pesticides on salmon bearing streams. How was this determined? Seasonal and non-fish bearing streams have not been considered. Isn't this the water that feeds the fish-bearing streams and rivers? Stream buffers and logging practices in this state are a joke--a sad joke.	1		Forestry - Pesticides; Forestry - Riparian					
248					75-B	Ecological function of the Oregon Coast Range and Cascade Range Foothills has been and continues to be severely degraded by the harvest activities associated with industrial, clear-cut logging. Look in any direction and clear cuts abound. (Up to 120 acres are allowed by the OFPA!)	1		Forestry - Clear cuts					
249					75-C	Concerned about lack of riparian buffers in clear cuts and spraying.	1		Forestry - Riparian; Forestry - Clear Cuts; Forestry - Pesticides					
250					75-D	Inspected recent road failure: The down hill shoulder of this mid-slope sited road had broken away in several locations, due to fill slope failure. Mud and debris flows, some recent, were much in evidence, their effect on the watershed some two or three hundred feet below, clearly discernible. This phenomenon, obviously the result of heavy rain fall on deforested and very steep slopes, has repeated itself with regularity over the years I have been roaming these hills. It is a disgrace and impacts directly on water quality. The cost to repair the failure will be borne by U.S. taxpayers through BLM & FHA.	2	First-hand account	Forestry - Clear cuts; Forestry Landslides; Forestry - Roads		Deleted "lack of riparian buffers". Also, deleted Forestry-Riparian from 'Category of Comment'. Riparian issue is not raised on page 1 of this letter. Roads are, however, mentioned			
251					75-E	Notes changes in tax law favor private timber industry and don't recoop enough $ to help local govn't. Amounts to shameless taxpayer-funded PR propaganda for timber interests. Illustration of "deliberate lack of political will to fund the appropriate agencies and activities that are crucial to improving Oregon's degraded water quality.	2		Forestry - General					
252					75-F	Points out that "NOAA noted in its fairly recent opinion about potential ESA delisting of the Coastal Coho Salmon, the benefits of such riparian restorations, although worthwhile, were being rapidly outstripped by the effects of logging in the uplands. Nothing has changed."	3		Forestry - General; Forestry - Riparian					
253					75-G	Recognizes that disapproval will have finanical consequences for 319 that their organization and others benefit from but its time for state to do something.	3		Forestry - General; Penalties - Benefits					
254					75-H	Rip Stream found the OFPA to be out of compliance with Clean Water Act Standards. Since that finding four years ago riparian buffers on private langs remain negligible to nonexistent.	3		Forestry - Riparian					
255					75-I	Impacts of siltation: the port of Bandon and other coastal facilities require regular and expensive dredging to remain open. This water born mud does not fall with the rain.	3		Forestry - Riparian		all added by EP from original letter			

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
256					75-J	Umpqua Watersheds implores you to pressure Oregon to fulfill obligation to all beings and the habitats that depend upon abundant, clean, cold water for continued healthy existence.	3		Forestry - Riparian					
257					81-C	SWCDs and watershed councils are improving water quality in Oregon.	1		General-made improvements in water quality					
258		Associated Oregon Loggers, Inc.	organization	3/21/14	79-A	Disagrees with proposed decision. Additional MMs for forestry are not needed.	1		Additional MMs Not Needed	Against	1			
259					79-B	Supports OFIC letter and statements they make	1		Forestry -- General					
260					79-C	OFPA includes a specific mandate to the Board of Forestry to achieve and maintain water quality standards, and provides the Oregon Department of Forestry with enforcement authority. The EPA and NOAA have produced little meaningful evidence that Oregon's forest practices rules currently fail to meet these water quality and beneficial use objectives. To the contrary, there is a large body of science indicating that modern Oregon forest practices are either neutral to positive in terms of their effect on aquatic life	2		Forestry -- General					
261					79-D	Oregon's forest sector has a 15-plus year history of superior voluntary riparian watershed enhancement accomplishments. Restrictions/actions proposed by the EPA and NOAA would stifle these valuable watershed improvements. Additionally, the excessive restrictions envisioned by EPA and NOAA would unintentionally smother the willing cooperative stewardship ethic common in the forest sector.	2		Forestry - Riparian					
262					79-E	Professionals from the forest and aquatic resource communities now recognize that active riparian management is often necessary to improve achievement of conservation goals. Initial results from the first two of the three Oregon forest stream research studies (Watersheds Research Cooperative) indicate a positive fish response following timber harvesting under the current OR Forest Practices Act & Rules.	2		Forestry - Riparian					
263					79-F	There may be opportunities to enhance and sustain gains in fish populations through active riparian treatments, including harvesting to increase discharge, thinning of riparian forests to levels that promote primary production in the stream or adjacent understory, and large wood placement in streams. These enhancements are best accomplished via voluntary forest landowner stewardship efforts. Resources diverted toward unnecessary EPA and NOAA-proposed restrictions would limit the ability of private landowners to invest in watershed restoration efforts, including enhancements to riparian areas and forest roads. Where active management provides financial gains to the forest landowner, there are greater opportunities to address water resource enhancement needs.			Forestry - Riparian					
264					79-G	Any criticism of the existing OR Forest Practices Act and Rules must be tempered against a dynamic background of evolving science and management experience. For example, clean wood to enhance fish passage and avoid oxygen deficits changed to promote large wood recruitment. Or, retain large conifers along streams to understanding the benefits of riparian hardwoods and diversity and conifers.			Forestry - Riparian					
265					79-H	The Oregon Board of Forestry must continue to have the authority and latitude necessary to develop practical, understandable, and effective riparian and watershed rules tailored to Oregon's forest stewardship community. It is by this Board of Forestry latitude to conduct state-specific policymaking—suited to Oregon's forests-streams-landowners-operators-stewardship culture—that can best provide certainty to forest landowners, and can ideally foster increased future conservation investments made in watershed improvements. EPA and NOAA's intended rigid, regulatory norms—such as excessive one-size-fits-all singular distances—would stifle Oregon forest community's stewardship ethic, and thereby reduce/or end the valuable contemporary investments in watershed enhancement experienced on Oregon forestlands (since the 1998 advent of the Oregon Plan for Salmon & Watersheds)	3		General - one-size-fits all	I added text beginning text from original letter to better capture full concept. Changed this code from 79-E to 79-H in order to keep comments in order.				
266		Oregon Association of Clean Water Agencies, Legaue of Oregon			80-A	100 - - is an effective nonpoint source pollution reduction program, and the State should be given credit for its success. It limits new development in urban growth boundaries where sewer and stormwater services are planned for.	1	Land Use	General-made improvements to water quality	unclear			1	
267					80-F	The second of three concerns for NPS controls in Oregon's coastal zone is the need for improved compliance programs and metrics to monitor agricultural sources. An overall compliance strategy for ensuring that AWQM plans and rules are adequately implemented to effectively meet TMDL load allocations and water quality standards is needed. There must be a policy and process for proactive determination of the implementation of required elements of the Agriculture Water Quality Management Plan, and an enforcement response plan to correct instances of non-compliance.	3	Ag compliance and implementation	Ag-general					
268					80-J	The third of three concerns is the continued efforts to link the Oregon Forest Practices Act to water quality standards outcomes. They applaud the recent collaboration between the Oregon EQC and BOF to improvement communication and share data related to water quality compliance of the Oregon FPA and to understand how FPA can be used as a tool to meet Oregon WQS.	4	Pro-FPA compliance with WQS	Forestry-general					
269					80-K	Efforts by ODF to monitor and improve forest practices should be encouraged and continued.	4		Forestry-general; Monitoring-improvements needed					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
270		Cities, Special Districts Association of Oregon	organization	3/21/14	80-L	Additional efforts are needed to address legacy road conditions and protection of non-fish bearing streams in oregon's forests.	4		Forestry-roads; Forestry-riparian					
271					82-A	Asks NOAA/EPA to give state additional time to meet remaining conditions; state has already made good progress in meeting most of conditions.	1		General-need more time		1			
272					82-B	Notes ODF has been doing good work to improve WQ, riparian habitat, and road improvements. Cites # of culverts replaced and other stats.	1 and 2		Forestry-general; Forestry-riparian; Forestry-roads					
273					82-C	Cites ODFW study that showed many out-migrating and returning salmon to Tillamook State forest land. OR allows salmon harvest because #s are good.	2	more returning salmon in Tillamook forest	General-salmon;					
274					82-D	Asks NOAA/EPA to review Trask Study re: forestry practices and water quality that presents factual science. Our decision should be based on science.	2		Forestry-general; General-water quality					
275		Tillamook Board of Commissions	organization	3/21/14	82-E	Notes they have been part of group of federal, state, county and private citizen group that's been working to collaborative restore fish pass in Tillamook area. Taking a novel approach and having good success.	2		General-salmon; General made improvements in water quality	Against				
276					50-B	Very concerned about pesticide spraying on private forests--impacts humans, animals and organic farming.	1		Forestry-pesticides	Unclear			1	
277					83-C	Water quality standards in coastal watersheds fail to protect Oregon's native fishes including; Coho and Chinook salmon, Cutthroat, Summer and Winter Steelhead.	1	WQS	Salmon-need more protection; General-fails to meet WQS/uses					
278					83-D	DEQ is not protecting our waters sufficiently to ensure our fish are free from toxic contamination, and that our rivers are not protected enough so we can swim in all of our watersheds	1	Toxics affecting fish	Salmon-need more protection					
279					83-H	The logging of unstable slopes and Type N stream created polluted runoff and the existing logging road network is also source of sediment.	1		forestry-riparian; forestry-landslides; forestry-roads					
280					83-J	Voluntary efforts to protect water quality and habitat have been dwarfed by the lack of rules to protect water quality.	2		General-voluntary approaches; General-need to improve water quality					
281					83-K	No rules in place to protect ecological function and processes on industrial timber or agricultural lands	2		general					
282					83-L	Do not believe that Oregon has in place a program to adequately protect riparian zones that are critical to maintaining cold clean water essential to the recovery and health of our native aquatic species	2		Forestry-buffers; Ag-buffers; General-water					
283					83-M	Watershed council completed a herbicide monitoring program found runoff from all sources of applications – road side use, and agricultural and forestry operation. While they may have applied it correctly there was still run-off and the rules were ineffective to truly protect water quality	2		General-need to improve water quality; forestry-pesticides; ag-pesticides					
284					84-E	The focus of CZARA is not the use of specific measures identified in the 6217(g) guidance, but rather the design and implementation of appropriate measures – regardless of form - that can be developed and applied to ultimately achieve measurable beneficial results.	3	CZARA approval relies not on specific measures, but design and implementation of appropriate measures	General-problems with CZARA					
285					84-F	Congress specifically required that such measures could only be implemented so long as they are "economically achievable."	4	CZARA guidance	General-problems with CZARA					
286					85-A	Support disapproval	1		Decision			1		
287					85-B	Concerne with water quality, toxics, deforestation and fisheries health	1		General - fails to meet wqs/uses					
288					85-C	FPA, Right to Forest and Pesticide Pre-emption laws have led to water quality impairments/poisoning in Rogue/Umpqua.	1		Forestry- General; Forestry - pesticides					
289		(b) (6)			85-D	Coastal watersheds are impaired due to state govn't corruption and control by forest and chemical industry. Cites 2 examples of how EPA has gotten involved with two problems in OR (OR Health Authority's Hwy 36 investigation and Curry County airial spraying poisoning)	2		Forestry - pesticides					
290			citizen	3/20/14	85-E	Supports Beyond Toxics Comments.	2		Forestry - pesticides					
291					57-D	Oregon has repeatedly submitted a coastal nonpoint program that EPA and NOAA have repeatedly refused to approve, in large part because it did not include adequate regulation of forest practices in the form of additional management measures.	9	including excerpts from January 13, 1998, EPA and NOAA, Findings for the Oregon Coastal Nonpoint Program. Excerpts from 2004 interim decision document and 2008 response to Oregon's 2007documents. Citation of September 20, 2006 email to Robert Baumgarnter from Amanda Punton.	Forestry -- General; Forestry -- riparian; Forestry -- landslides; Forestry -- roads					
292					57-E	Fully agrees with EPA and NOAA findings that Oregon has failed to develop and implement additional management measures for foresry and so has failed to submit an approvable program under CZARA.	12		Forestry -- General					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
293					57-F	Oregon's voluntary and regulatory forest practices programs do not sufficiently protect water quality or designated beneficial uses.	12	OR Forest Practices Act, Revised Statutes §527.610	Forestry -- General					
294					57-G	Oregon's forest practices program improperly equates compliance with forest practices regulations with compliance with water quality standards.	13	ORS §527.770	General -- water quality; Monitoring -- improvements needed; Forestry -- General					
295					57-H	ODEQ has failed to use its authority to override ODF's inadequate forest practices in order to bring compliance with water quality standards	13	Comparisons to State of Washington esp. HCP's	General -- water quality; Forestry -- General					
296					57-I	Failure to protect water quality from impacts due to roads, buffers, and logging on steep/unstable slopes	15	Declaration of Christopher A. Frissell, Ph.D. submitted in support of letter and incorporated by reference	Forestry -- General; Forestry -- riparian; Forestry -- landslides; Forestry -- roads					
297					57-J	Effectiveness of the overall system of riparian management zones in maintaining sufficiently low turbidity is diminished at a watershed scale due to inadequate buffers in headwater basins.	17		General -- fails to meet wqs/uses; Forestry -- riparian					
298					57-K	Clearcutting riparian areas around streams increases the probability of debris flows and sediment delivery to streams due to the accumulation of debris.	18		Forestry -- riparian; Forestry -- clear cuts		4	23	7	34
299					57-L	Riparian buffers in Oregon's rules do not sufficiently prevent the warming of streams that accompanies loss of canopy cover, do not sufficiently filter nutrients and sediment from surface waters draining through riparian buffers, and do not protect streams from debris flows and landslides.	20		Forestry -- riparian					
300					57-M	The science is overwhelming: Oregon's riparian buffer and steep slope loggigng rules are insufficient to protect water quality and all designated beneficial uses.	20		General -- fails to meet wqs/uses; Forestry -- riparian; Forestry landslides					
301					57-N	The construction, use, maintenance, and existence of logging roads detrimentally affects stream health and aquatic habitat by increasing sediment delivery and stream turbidity.	20		Forestry -- roads					
302					57-O	Oregon's forest practices rules impose generic BMPs and do not use pertinent water quality data to drive road management decisions; in fact they are precisely the kinds of BMPs that have been shown to be inadequate and ineffective at protecting water quality and beneficial uses.	22		General -- water quality; Forestry -- roads					
303					57-P	Oregon forest practices regulations applicable to forest roads consistently prioritize logging over protection of water quality.	23	Oregon's rules do not require ODF to disapprove written plans for the construction of logging roads that may result in adverse water quality impacts.	General -- water quality; Forestry -- roads					
304					57-Q	Oregon's road location rule does not require operators to eliminate or avoid water quality problems; rather, it simply requires them to minimize risk. EPA and NOAA cannot approve Oregon's CNPCP component for forest roads simply based on rules that require operators to minimize the risk to waters of the state.	23-24	"minimizing risk" is not the same as avoiding adverse water quality impacts	General -- water quality; Forestry -- roads					
305					57-R	Oregon's forest road rules are so loaded with vague, ambiguous, precatory, and conditional language that they can afford EPA and NOAA no rational basis for concluding that they ensure protection of water quality and designated beneficial uses in Oregon's coastal areas.	24	*"avoid* locating roads on steep slopes, slide areas, high landslide hazard locations where *viable* alternatives exist" and "make use of existing roads where *practical."* Who decides what is practical or vialbele and what criteria are used in the analysis?	Forestry -- landslides; Forestry -- roads					
306					57-S	EPA and NOAA cannot rely on Oregon's enforcement authority where enforcement most likely only occurs *after* damage to water quality occurs. OAR 629-625 rules generally mean that so long as operators are not harming wter quality they are in complance with the rule.	24		Forestry -- General					
307					57-T	Oregon's wet weather road use rule's purpose is "to reduce the delivery of ifine sediment to streams caused by the use of forest roads during wet periods that may adversely affect downstream water quaility in Type F or Type D streams," is designed to reduce delivery of fine sediment, but not esigned to elimate the elivery of fine sediment or to ensure that such delivery does not impair water quality.	25	OAR-625-0700	Forestry -- roads					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
308					57-U	Oregon road rules lack a requirement to bring existing, inactive logging roads and other forest roads up to a standard that effectiely prevents water quality problems. This resultes in many forest roads which are not currently being used for logging falling through the regulatory cracks and continuing to have a negative impact on water quality.	26		Forestry -- roads					
309					57-V	Implementation of BMPs without reference to and monitoring of applicable water quality standards -- including the protection of designated beneficial uses -- is simply inadequate to protect Oregon streams.	27		General -- water quality; Monitoring -- improvements needed; Forestry -- General					
310					57-W	Despite EPA's and NOAA's telling Oregon for over a decade that its forest practices programs are not sufficiently protecting water quality, and despite ample and relevant science demonstrating that clear-cutting and other logging practices in Oregon generate nonpoint source pollution that harms water quality, Oregon substantially increased the amount of clear-cutting allowed in North Coast state forests.	28	Current FMP goals allow clear-cutting of roughly an additional 100,000 acres above the goal in the previous FMP.	Forestry -- General; Forestry -- clear cuts					
311					57-AA	DEQ has issued NPDES permits in the Rogue River Basin on the assumption that nonpoint sources will contribute zero heat load, but made a completely contrary assumption when it allwoed the City of Medford to plant trees on agricultural lands in lieu of directly reducing the thermal load in its discharge. This contrary assumption undermines any suggestion that Oregon relies on the load allocations established for nonpoint sources in its temperature TMDLs to protect riparian vegation sufficient to meet water quality standards.	37		General -- fails to meet wqs/uses; Ag -- General					
312					57-BB	Approvable state programs are required to assess over time the success of the management measures in reducing pollution loads and improving water quality. Because it has not identified the practices that constitute Oregon's version of meeting management measures, it would be impossible for the state to ascertain whether the managment meaures are in place and whether they have been successful in reducing pollutant loads sufficiently to avoid the need for additional managment measures.	37	ODA findings for coastal watersheds (Coos/Coquille, MidCoast, North Coast, Bear Creek, Inland Rogue, Umpqua)	General -- need to consider other issues; Ag -- General					
313					57-CC	Oregon water quality standards and designated uses require the implementation of additional management measures. Given that in almost all instances, an allocation to all nonpoint sources for temperature increases is zero, it is even more likely that agricuture is currently contributing to violations of temperature standards and therefore requires additional managment measures.	39		General -- fails to meet wqs/uses; General -- need to consider other issues; Ag - General					
314					57-FF	Bear Creek cannot be held up as an example of how Oregon has a program to control agricultural nonpoint source pollution because it is primarily an example of how unique circumstances can pressure nonpoint sources into taking significant action. Absent those circumstances, the actions will not occur.	46		General - voluntary approaches; Ag -- General					
315					57-GG	Oregon's management measures for pesticides are not adequate to meet water quality sandards including full support of desingated uses in Oregon and additional management measures are required.	47		General -- fails to meet wqs/uses; Toxics/Pesticides; Forestry - pesticides; Ag -- Pesticides					
316					57-JJ	Oregon ignores many of its standards and data when it develops its 303d lists with the effect that data are not translated into impaired waters listings with any regularity.	49		General -- water quality					
317					57-KK	Oregon's CNPCP fails to identify land uses and critical coastal areas that will require additional management measures to attain and maintain water quality standards because it relies on a flawed Clean Water Act section 303d listing process to identify impaired streams.	50	CZARA Program Guidar	General -- water quality; General -- need to consider other issues					
318					57-LL	EPA and NOAA guidance urges states to rely on their 303d list for purposes of CZARA, but the problem with doing so in Oregon is that the DEQ has, for many years, failed to meet the requirements set out in federal regulations to "assemble and evaluate all existing and readily available water quality related data and information to develop the list."	52		General -- water quality; General -- need to consider other issues					
319					57-MM	DEQ does not use its nonpoint source assessments to develop its 303d lists, contrary to EPA listing guidance and EPA/NOAA CZARA guidance.	52		General -- water quality; General -- need to consider other issues					
320					57-NN	Oregon fails to identify land uses causing or threatening water quality impairments by ignoring a wide variety of technical information available to identify land uses that consistently cause or contribute to violations of water quality standards in coastal watersheds and harm designated uses.	53	E.g., ESA-listed coho and their habitat.	General -- fails to meet wqs/uses; General -- Salmon; General -- need to consider other issues					
321					57-OO	Oregon does not use TMDLs to identify critical coastal areas as required for approval programs under CZARA.	58		General -- need to consider other issues					
322					57-PP	Oregon's TMDL program changes numeric criteria for temperature bypassing section 303c federal approval and producing criteria in excess of safe levels for cold-water species.	59		General -- fails to meet wqs/uses; General -- salmon; General -- need to consider other issues					
323					57-QQ	Oregon's TMDL program fails to result in changes to nonpoint source controls sufficient to meet load allocations established in TMDLs and necessary to meet water quality standards.	61	40 CFR § 130.2 (i)	General -- fails to meet wqs/uses; General -- need to consider other issues					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
324					57-RR	Most Oregon coastal watershed TMDLs establish load allocations for nonpoint sources but their associated water quality management plans fail to support an effective coastal nonpoint source pollution control program	62		General -- fails to meet wqs/uses; General -- need to consider other issues					
325					57-SS	Despite nearly all of the TMDLs for temperature in Oregon's coastal watersheds' having established a load allocation of zero heat increase for nonpoint sources, the load allocations have not been used to determine minimum riparian buffer width, height, and density to achieve the load allocations.	69		General -- fails to meet wqs/uses; General -- need to consider other issues; Forestry -- riparian					
326					57-TT	Oregon TMDLs fail to evaluate whether CZARA management measures are sufficient to meet load allocations for nonpoint sources and fail to establish additional management measures needed to meet load allocations for nonpoint sources.	70		General -- fails to meet wqs/uses; General -- need to consider other issues					
327					57-UU	Oregon fails to systematically address violations of water quality standards caused by excess sedimentation.	76	"Methodology for Oregon's 2012 Water Quality Report and List of Water Quality Limited Waters."Oregon DEQ	General -- fails to meet wqs/uses; General -- need to consider other issues					
328					57-VV	The current status of listed aquatic species in Oregon, and Oregon's failure to make a dent in recovery efforts for those species, demonstrate that Oregon's water quality protection programs are inadequate and not meeting CZARA standards.	81		General -- fails to meet wqs/uses; General -- Salmon; General -- need to consider other issues					
329					57-WW	EPA and NOAA have violated the law by failing to withhold CWA and CZMA grant money from Oregon since 1998. EPA's and NOAA's "conditional approval" of Oregon's CNPCP contravenes CZARA and cannot be maintained.	81	16 USCA § 1455 b c	General					
330					57-WW	EPA and NOAA have violated the law by failing to withhold CWA and CZMA grant money from Oregon since 1998. EPA's and NOAA's "conditional approval" of Oregon's CNPCP contravenes CZARA and cannot be maintained.	81	16 USCA § 1455 b c						
331	PL			NEWA	57-AAA	The rules generally do not protect non-perennial, or intermittent, streams, which Oregon's rules state will be determined "by the State Forester based on a reasonable expectation that the stream will have summer surface flow after July 15," nor is there any required riparian management area for seeps and springs	17	Riparian						
332	PL			NEWA	57-BBB	If riparian buffers are not required for non-fish bearing streams, they become a source of excess sediment to perennial, fish-bearing channel networks as sediment is transported downstream. Thus, the effectiveness of the overall system of riparian management zones in maintaining sufficiently low turbidity is diminished at a watershed scale due to inadequate buffers in headwater basins.	17	Riparian						
333	PL			NEWA	57-CCC	Landslides in clearcuts are more likely to deliver to streams, and to impair water quality with episodic and chronic sedimentation, than landslides in forested areas.	18	Riparian						
334	PL			NEWA	57-DDD	Increased erosion and corresponding increases in sediment delivery and sedimentation contribute to channel simplification, including losses in the depth, frequency, and quality of pools and off-channel habitat critical for fish rearing. Increased sedimentation also contributes to increased levels of fine sediment, which greatly reduces salmonid survival from egg-to-fry life stages. Elevated sediment delivery also increases turbidity that can impair salmonid sightfeeding and cause gill damage—both factors that can contribute to indirect mortality	19	Riparian						
335	PL			NEWA	57-EEE	Increases in sediment delivery can further harm coho by contributing to increases in width/depth ratios in sensitive streams, which inevitably increases summer water temperatures even in the absence of the loss of shade.	19	Riparian						
336														
337														
338	AH				0-C	The goals and vision of the Oregon BOF is to support a broad suite of BMPs to insure that forest operations are conducted in a manner that supports water quality standards. The FPA describes the relationship between the Board and the EQC giving oversight to the DEQ in carrying out the rules and statutes regarding implementation of the CWA. ORS 527.765 describes the relationship.	11		Forestry - general					
339	AH				0-D	The 2002 Sufficiency Analysis found that for small and medium fish streams, current stream buffer prescriptions may result in short-term temperature increases on some Type F streams; however the significance of the potential temperature increases at the watershed scale is uncertain. Follow-up monitoring (RipStream) showed that riparian protections on small and medium fish-bearing streams do not insure achievement of the PCW standard.	11		Forestry Riparian					
340	AH				0-D	Currently the BOF is conducting rule analysis for small and medium fish bearing streams in response to ODF's RipStream monitoring results. Small and medium fish bearing stream protection rule analysis and Board action taken to implement any resulting changes in BMPs is planned for completion by the end of the year.	12		Forestry - Riparian					

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
341	AH				0-E	Stream temperature and shade one to five years post harvest; temperature effects downstream of harvest; large wood recruitment; and riparian stand characteristics and functions analyses are a priority and ODF will work with th eBoard and the DEQ to establish timelines for completion.	12							
342	AH				0-F	Under ORS 468B.110(2), ORS 527.765, and ORS 527.770, the Board of Forestry establishes best management practices or other control measures by rule that, to the maximum extent practicable, will ensure attainment and maintenance of water quality standards. If the Environmental Quality Commission does not believe that the FPA rules will accomplish this result, the EQC is authorized to petition the Board for more protective rules. If the EQC petitions the Board for review of BMPs, the Board has two options: terminate review with the EQC concurrence, or begin rulemaking. If the Board determines that BMPs should be reviewed, rules specifying the revised BMPs must be adopted not later than two years from the filing date of the petition for review, unless the Board, with concurrence of the EQC, finds that special circumstances require additional time.	12		Forestry - General					
343	AH				0-G	Upon the EQC's request, the Board is required to take interim action "to prevent significant damage to beneficial uses" while the BMPs are being reviewed. The "BMP shield" under ORS 527.770 is lost if the Board fails to complete BMP revisions, or makes a finding that revisions are not required, within the statutory deadline. In addition, under 468B.110(2), the EQC cannot adopt rules regulating nonpoint source discharges from forest operations and the DEQ cannot issue TMDL implementation plans or similar orders governing forest operations unless "required to do so by the CWA." This authority would also be triggered by the failure of the Board to adopt adequate BMPs to implement TMDL allocations for forestry or to avoid impairment of water quality such that standards are not met.	12		Forestry Legal					
344	AH				0-H	As EPA and NOAA determined in 1998, Oregon's forestry program satisfies the CZARA forestry measures. The forestry program also includes provisions for revising or implementing additional forestry measures as needed to address water quality impairments. Oregon's forestry program, in concert with Oregon's policy and regulatory framework for protecting water quality relies on land use laws (Goal 4 – Forest Lands), an adaptive Forest Practices Act (FPA), and voluntary measures under the Oregon Plan for Salmon and Watersheds. This three-tiered approach results in forestland having the highest water quality in Oregon, and avoids the impairment that would be caused by land use changes (ex-urban sprawl) seen in other states.	12		Forestry Rules					
345	AH				0-I	Under existing State forest practices, medium, small, and non-fish bearing streams may be subject to loss of sediment retention capacity, increases in delivery of fine sediments, and increases in temperature due to loss of riparian vegetation. Another concern is provision of adequate long-term supplies of large woody debris in medium, small, and non-fish bearing streams, a shortage of which can result in decreased sediment storage in upstream tributaries, increased transport and deposition downstream, and overall adverse impacts to beneficial uses.	13		Forestry - Riparian					
346	AH				0-J	Oregon agrees that these are valid concerns, and the Board of Forestry is addressing them through the Forest Practices Act. The FPA requires the state to regulate forest practices to ensure water quality standards are achieved. (OAR 629-635-0100) This regulatory program includes provisions to identify inadequacies and revise regulations as needed to ensure water quality is protected. Oregon's efforts to address concerns on small and medium fish streams are described below.	14		Forestry Riparian					
347	AH				0-K	Changes to protections of Small and Medium Fish Streams since 1998 include 1. the use of physical habitat criteria to determine if streams may support fish use. (OAR 629-635-0200). Reclassifying streams with human-made barriers as fish-bearing upstream to the first natural barrier (OAR 629-635-0200). Voluntary measures for high aquatic potential (HAP) streams, including large wood placement, additonal basal area in stream buffers, large tree retention and treating Large and Medium sized non-fish streams the same as fish streams for stream buffer retentions. (Report to Oregon Watershed Restoration Inventory).	14		Forestry Riparian					
348	AH				0-L	The Board is conducting rule analysis for small and medium fish bearing streams in response to ODF's RipStream monitoring results. Small and medium fish bearing stream protection rule analysis and Board action taken to implement any resulting changes in BMPs, is planned for completion by the end of this year. Stream temperature and shade one to five years post-harvest; temperature effects downstream of harvest; large wood recruitment; and riparian stand characteristics and functions analyses are a priority and ODF will work with the Board and the DEQ to establish timelines for completion.	14		Forest Riparian					
349	AH				0-M	Oregon has invested in three paired watershed studies that are testing hypotheses related to harvest effects at a watershed and reach scale as well as downstream. Results from the Hinkle Creek paired watershed study support the variable temperature response of non-fish bearing stream to harvests under forest practices standards. They also indicate that there was no measureable downstream effect on stream temperatures. The Trask paired watershed study received additional funding from the 2013 legislative session to continue vital research on small non-fish bearing streams. The results from these studies will complement other research on these highly variable headwater stream systems and allow Oregon to evaluate the current level of protection.	14		Forestry- Riparian					
350	AH				0-N	The paired watershed studies and other monitoring programs demonstrate the State's commitment to a continuous learning and adaptive management approach to forestry best management practices. The state will use this important research and other information to ensure a science-based analysis of the effectiveness of current measures on non-fish bearing streams.	15		Forestry - Riparian					

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351	AH				0-O	Executive order 99-01 established the Oregon Plan for Salmon and Watersheds (OPSW, implemented as ORS 541.985). This uniquely Oregon approach to improving water quality, salmon habitat, and watershed health is an overarching plan that prioritizes necessary actions throughout Oregon for restoring and protecting watershed health and function thus providing for a resilient ecosystem	46		Forestry - Riparian-General					
352	AH				0-P	The executive order also directed Oregon to complete a comprehensive review of current forest practices in regard to state water quality standards and the protection and restoration of salmonids. This comprehensive review, the Sufficiency Analysis (ODF and DEQ 2002), coupled with recommendations of from the Independent Multidisciplinary Science Team (IMST 1999) and Forest Practice Advisory Committee (ODF 2000) identified additional forestry measures to address gaps in current FPA rules and BMPs that may lead to potential negative impacts from forest activities near streams.	47		Forestry - Riparian-General					
353	AH				0-Q	The Board formally completed addressing all rule concepts identified in the FPAC report on April 20093 with the inclusion of the remaining two rule concepts in and endorsement of the Oregon Plan for Salmon and Watersheds voluntary measures (Morgan 2012). While the April meeting closed the FPAC process, the Board's ongoing adaptive management process, including policy analysis, rules and BMPs review, research, and monitoring frameworks, continues with ongoing review and improvement of forest practices resources protection issues. Key examples include the ongoing Watershed Research Cooperative4 paired-watershed studies at Hinkle Creek, Trask River, and Alsea Revisited, the ODF RipStream study, and the Board's rule analysis on small and medium fish streams.	48		Forestry - Riparian-General					
354	AH				0-R	The Statewide Evaluation of Forest Practices Act Effectiveness in Protecting Water Quality (ODF and DEQ 2002) identified additional forestry measures to address gaps in current FPA rules and BMPs that may lead to potential negative impacts from forest management activities near streams. The analysis concluded that, with respect to all applicable standards (temperature, sedimentation, turbidity, aquatic habitat modification, and bio-criteria):	49		Forestry Riparian					
355	AH				0-S	Standards for some medium and small Type F streams in western Oregon may result in short term temperature increases at the site level. However, the significance and scope of this increase is uncertain, and it may be offset at the landscape scale by other factors. Relevant to the habitat modification standard and criteria, large wood potential for some of these streams are less than what was assumed under the 1994 rules.	49		Forestry - Riparian					
356	AH				0-T	Standards for some small Type N streams may result in short-term temperature increases at the site level that may be transferred downstream (this may impact water temperature and cold-water refugia) to fish-bearing streams. The significance and scale of this change is uncertain, and it may be offset at the landscape scale. Relevant to the habitat modification standard and criteria, large wood potential delivered by debris torrents (typically in areas of very steep topography) along these streams may be less than optimal.	49		Forestry - Riparian					
357	AH				0-U	Oregon's concerns were consistent with the 1998 Findings for the Oregon Coastal Nonpoint Program (NOAA and EPA 1998). Under Section X, "Critical Coastal Areas, Additional Management Measures and Technical Assistance" the NOAA and EPA found:Under existing State forest practices, medium, small, and non-fish bearing streams may be subject to loss of sediment retention capacity, increases in delivery of fine sediments, and increases in temperature due to loss of riparian vegetation. Another concern is provision of adequate long-term supplies of large woody debris in medium, small, and non-fish bearing streams, a shortage of which can result in decreased sediment storage in upstream tributaries, increased transport and deposition downstream, and overall adverse impacts to beneficial uses.	49		Forestry - Riparian					
358	AH				0-V	Non-Fish Bearing Stream Protections – The FPA contains language that prescribes management measures which protect small non-fish bearing streams from potential impacts during forest management activities (OAR 629-630-0700 (5), 629-630-0800 (2)), stream crossings (OAR 629-630-0800 (4)), and requires vegetation retention in certain instances (OAR 629-640-0200 (6)).	51		Forestry - Riparian					
359	AH				0-W	the FPA requires prompt reforestation after harvest along small non-fish bearing streams (OAR 629-610-0040 (2)). This requirement ensures rapid recovery of riparian protection provided by forest tree species. An exception to prompt reforestation does exist however when an approved land use change is filed. When forestland is converted to another land use incompatible with forest tree species a different set of land use laws and riparian protections would apply.	51		Forestry - Riparian					
360	AH				0-X	Riparian Management Areas (RMAs) Upstream of Artificial Barriers –In 2007, the Board adopted new rules that apply to streams classified as non-fish bearing as a result of an electrofishing survey upstream of a man-made barrier to fish migration. The new rule stated that the upstream portion of the stream should be correctly classified as fish-bearing (Type F), upstream to the first natural barrier. This rule change closely aligns with stream crossing improvements being completed as a result of voluntary or regulatory measures and preserves an intact RMA to benefit fish and water quality when upstream habitat access is restored. The Board also adopted a rule that allows fish presence/absence to be determined by the use of field-based physical habitat criteria surveys in addition to electrofishing field surveys. Use of the physical habitat criteria is likely to result in more conservative estimates, in terms of fish use miles, of the end of fish use.	51		Forestry - Riparian					

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361	AH				0--Y	High Aquatic Potential (HAP) Streams – The Board adopted a new voluntary measure in 2009 that clearly describes physical stream characteristics that have the highest potential to benefit fish habitat by the active placement of large wood or other in-stream structures. This voluntary measure compliments the 2003 Board decision to approve additional voluntary measures designed to increase stream complexity through active in-stream wood placement and voluntary tree retention in the RMA's of fish bearing streams. Additional voluntary measures include a 60% basal area cap for medium and small fish bearing streams, no harvest within ½ of the RMA width, and retaining the largest trees in the RMA. The Board also approved adoption of a voluntary measure to promote managing large and medium non-fish bearing stream buffers the same as large and medium fish bearing stream buffers.	51		Forestry - Riparian					
362	AH				0-Z	Currently, the Board is conducting a rule analysis process for riparian protection standards for small and medium fish bearing streams. The rule objective is: "Establish riparian protection measures for small and medium fish-bearing streams that maintain and promote shade conditions that insure, to the maximum extent practicable, the achievement of the Protecting Cold Water criterion." The rule analysis was initiated in response to results from ODF's Riparian Function and Stream Temperature (RipStream) effectiveness monitoring project. RipStream is designed to monitor the effectiveness of stream protection rules as prescribed for State Forests and private forestlands. RipStream study sites are located throughout the Coast Range geographic region on small and medium sized fish-bearing streams. Currently, all 33 sites (18 Private and 15 State) have at least three years of post-harvest data and most sites have complete data sets (5-years post) for stream temperature, shade and channel data.	52		Forestry - Riparian					
363	AH				0-AA	The first effectiveness analysis (Groom et al. 2011a) focused on a strict regulatory perspective of stream temperature and evaluated RipStream sites for effectiveness in meeting stream temperature standards. The analysis evaluated DEQ temperature standards, with respect to the Protecting Cold Water Standard (PCW). For the PCW standard, timber harvests on state forests did not exceed the PCW more frequently than expected under natural background conditions (5%).On private lands, Timber harvests designed to the meet the FPA riparian protection standards for Medium and Small Type F streams exceeded the PCW at a greater frequency than would be expected by chance (40 % vs. 5 % for all other stream reaches). Note: because of stream temperature complexity, this analysis estimated the probability of an exceedance of the PCW criterion across pre-harvest to post-harvest treatment reach year-pair comparisons, and cannot be used to estimate the percentage of sites that exceeded the PCW or the magnitude of temperature change. The analysis indicated that all study sites performed well in regard to the maximum temperature thresholds established by the Biological Numeric Criteria standard (16° C, 18° C) an additional peer-reviewed journal article regarding the Biological Numeric Criteria is pending.	52		Forestry - Riparian					
364	AH				0-AB	A second analysis (Groom et al. 2011b) examined the magnitude of the expected change. At sites managed to FPA standards, maximum temperatures increased after harvest by an overall average of 0.7 °C. Sites exhibited variability in responses; some sites increased by 2.5 °C while other sites declined by 0.9 °C. The average change in maximum temperatures for state forest sites was 0.0 °C, and supported temperature models that considered state forest post-harvest years to resemble pre-harvest conditions. In turn, overall shade declined post-harvest at private sites but not at state sites.	52, 53		Riparian Forestry					
365	AH				0-AC	Board determined that the there is monitoring or research evidence that documents the degradation of resources maintained (i.e., that there is evidence that forest practices conducted under existing regulations do not insure forest operations meet the state water quality standard for protecting cold water on small and medium fish streams). The Board directed the department to begin the rule analysis process that could lead to revision of the riparian protection standards to increase the maintenance and promotion of shade on small and medium fish streams. Currently, the process for potential increase in basal area and/or riparian management area widths is under discussion with the Board and will follow Oregon's public policy process under ORS 527.714. In November 2013, ODF staff presented the results of a systematic review of science related to the rule objective and the Board limited the number of alternatives to those supported by the science. The board will review preliminary model results for developing new prescriptions (BMPs). The rule analysis is expected to be completed by end of 2014. The Board of Forestry has the legal authority to regulate forest practices through administrative rule making for the protection of water quality.	53		Riparian Forestry					
366	AH				0-AD	The main objective of the RipStream project is to evaluate the effectiveness of FPA forest practices rules and State Forests' management strategies at protecting stream temperatures and promoting desired riparian structure. Most of the focus to date, including the ongoing riparian rule analysis process, has been on the effectiveness of FPA and the State Forest Northwest Forest Management Plan (NWFMP) riparian protections for stream temperature. Further analyses are planned on the following topics: analysis fo stream temperature and shade response one to five years post-harvest; analyses of downsteam temperature outcomes following forest harvest; large wood recruitment; and riparian stand characteristics and functions.	53, 54							

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
367	AH				0-AE	“Small Type N” is an Oregon regulatory label for very small, non fish-bearing, headwater streams. While the body of information is growing on these very small streams, the definition for “headwater” streams varies, such that some of the available studies may actually be looking at the equivalent of “Medium” streams as defined by Oregon. Small Type N streams make up the majority of the stream network (estimates range from 70- 90%) in most Oregon regions. Responses to harvest are highly variable in characteristics, functions, and relative influence on downstream reaches.	54								
368	AH				0-AF	Reasons for variability include:Even without harvest water quality, sediment, wood loading, nutrient (etc.) patterns tend to be highly variable which can make it difficult to detect a harvest response, especially if the harvest effect is small; Ground water (which tends to remain stable/water quality not influenced by harvest) comprises a larger percentage of their surface water than in larger streams which can moderate harvest responses; Spatially intermittent streams with coarse gravels tend to be thermally non- responsive; and narrow channels can be shaded by grasses, ferns, shrubs, channel banks which may reduce the importance of overstory shade.	54								
369	AH				0-AG	The influence of Small Type N streams on downstream reaches has not been well documented. The WRC Paired Watershed Studies (Hinkle, Alsea, and Trask) are well situated to test hypotheses related to harvest effects on site as well as downstream. Results from the Hinkle Creek paired watershed study support the variable temperature response of non-fish bearing stream to harvests under forest practices standards. This study also did not detect a significant change in temperature from the four harvests at the watershed outlet (Kibler 2007).	54, 55								
370	AH				0-AH	Oregon continues to participate in the Oregon Watersheds Research Cooperative (WRC) at the OSU College of Forestry. Housed and led by OSU, The WRC conducts multi-agency, adaptive management, watershed research projects, including the Hinkle Creek, Trask River and Alsea paired watershed studies.	55								
371	AH				0-AI	The paired watershed studies and other monitoring programs demonstrate the State’s commitment to a continuous learning and adaptive management approach to forestry best management practices. The state will use this important research and other information to ensure a science-based analysis of the effectiveness of current measures on non-fish bearing streams.	55								
372	AH	DEQ and DLCD		3/20/14										
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